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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 09/736,157  | 12/15/2000  | Raulf M. Polichar    | SAIC0010-US         | 8389             |
| 27510   | 7590        | 08/19/2003           | 21                  |                  |
| KILPATRICK STOCKTON LLP<br>607 14TH STREET, N.W.<br>SUITE 900<br>WASHINGTON, DC 20005 |             |                      | EXAMINER            | CHEN, KIN CHAN   |
|   |             | ART UNIT             | PAPER NUMBER        |                  |
|   |             | 1765                 |                     |                  |

DATE MAILED: 08/19/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

|                        |                                  |                         |
|------------------------|----------------------------------|-------------------------|
| <b>Advisory Action</b> | <b>Application No.</b>           | <b>Applicant(s)</b>     |
|                        | 09/736,157                       | POLICHAR ET AL.         |
|                        | <b>Examiner</b><br>Kin-Chan Chen | <b>Art Unit</b><br>1765 |

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 11 August 2003 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

**PERIOD FOR REPLY [check either a) or b)]**

- a)  The period for reply expires \_\_\_\_\_ months from the mailing date of the final rejection.
- b)  The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.  
ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1.  A Notice of Appeal was filed on \_\_\_\_\_. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
2.  The proposed amendment(s) will not be entered because:
  - (a)  they raise new issues that would require further consideration and/or search (see NOTE below);
  - (b)  they raise the issue of new matter (see Note below);
  - (c)  they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
  - (d)  they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_

3.  Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.
4.  Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
5.  The a) affidavit, b) exhibit, or c) request for reconsideration has been considered but does NOT place the application in condition for allowance because: see attached sheets.
6.  The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.
7.  For purposes of Appeal, the proposed amendment(s) a) will not be entered or b) will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: \_\_\_\_\_

Claim(s) objected to: \_\_\_\_\_

Claim(s) rejected: \_\_\_\_\_

Claim(s) withdrawn from consideration: \_\_\_\_\_

8.  The proposed drawing correction filed on \_\_\_\_\_ is a) approved or b) disapproved by the Examiner.
9.  Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_.
10.  Other: \_\_\_\_\_

Kin-Chan Chen  
Primary Examiner  
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***Responses to the after-final request-for-reconsideration***

1. Applicant has argued that Mlcak does not teach using photo-electrochemical removal of a component of an alloy semiconductor to **form the N-type contact**. As has been stated in the office action, Mlcak teaches that, in forming various device structures, photo-electrochemical selectively etching (so-called removing in the instant claims) may be used for other semiconductor materials such as CdTe using suitable electrolytes, see col. 7, lines 42-45. In fact, in the specification, page 8, applicant clearly states that the formation of the rectifying contacts occurs by **removal of Te from one portion of the alloy, resulting in a metal surface enriched in Cd metal, which can function as an N\_type contact**. Hence, it would have been obvious to one with ordinary skilled in the art that forming an N-type contact is expected in the process of Mlcak because the same materials are used with the same process steps, it appears that it would inherently contain the same functions as claimed. Same reasoning for claim 42 in which removing (etching) process producing Te-enriched region (in the specification, page 11 line 22 through page 12, line 5).

Applicant has argued that the present invention does not add more material like prior art (page 9), and in fact, removes a component. In response, the instantly claimed invention (e.g., claim 42) **comprising** removes a component, however, the instant claims does not have the negative limitations of “excluding the addition of other materials”.

In light of the comments above, the obviousness rejections are maintained.

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2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kin-Chan Chen whose telephone number is (703) 305-0222. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nadine Norton can be reached on (703) 305-2667. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-2934.



Kin-Chan Chen  
Primary Examiner  
Art Unit 1765

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